

GASTERIA BAYLISSIANA RAUH: A NEW DWARF GASTERIA FROM SOUTH-EAST AFRICA

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ABSTRACT

A new dwarf *Gasteria* species from South-East Africa is described.

UITTREKSEL

GASTERIA BAYLISSIANA RAUH: 'N NUWE DWERG GASTERIA VANAF SUIDOOS-
AFRIKA

'n Nuwe dwerg *Gasteria*-soort vanaf Suidoos-Afrika word beskryf.

Gasteria baylissiana Rauh, sp. nov.

Planta: nana, modice sobolifera, greges parvos formans; solitaria usque ad 30 mm alta, 10 cm diametiens. *Folia*: disticha; *Lamina*: supra plana, rectangulariter patens vel recurvata, ligulata, apice late rotundata, breviter mucronata, 40-50 mm longa, 20 mm lata, margine anguste cartilagineo-limbata, viridifuscescenti-violacea, utrimque dense parvoque albido-verrucosa, itaque epidermide scabra; *Inflorescentiae*: singulariter erectae vel arcuatae usque ad 300 mm longae racemosae; *Scapus*: tenuis 80-100 mm longus, 2-3 mm diametiens, canoviolaceus, cereo-pruinosis; *Folia scapi*: 3-4 membranacea pergamentacea tenuia anguste triangulata usque ad 5 mm longa; *Racema*: 15-17 flora; *Bractee florales*: parvae membranaceae pedicello rubro 10 mm longo breviores; *Flores*: penduli, zygomorphi, plus minusve 15 mm longi; *Perigonium*: basi breve angustum, deinde ventricosum-inflatum, postremo in tubum brevem sursum curvatum se angustans; *Tepala*: anguste linguiformia, basi connata, partibus liberis 5 mm longis, 2 mm latis, viridia, apicibus reflexis refescentia, marginibus albo-limbatis, nervis medianis obscuris; *Stamina et stylus*: tepalis breviora.

Type: Farm Oudekraal, South of Somerset East, on a steep slope in a dense shade and leaf mould; *R. D. A. Bayliss* 2796, 23.4.65. (*holotypus*: Herbarium of the Inst. of Systematic Botany of the University of Heidelberg (HEID. No. 30517); *isotypus*: National Herbarium, Pretoria (PRE).

Plant nearly stemless, succulent, suckering from the base, forming dense clumps (Fig. 1-2); a single plant becomes up to 30 mm high and up to 100 mm broad. *Leaves* strongly distichously arranged, ligulate, rounded at the apex, shortly mucronate, 30-50 mm long, 20 mm broad, somewhat horny on the margin (Fig. 3); upper surface flat, lower slightly convex, both sides covered with numerous small, white tubercles (Fig. 3), so that the greenish-reddish-violet epidermis

becomes rough. *Inflorescences*: mainly unbranched simple (Fig. 4), lax; racemes with 15–17 flowers; the erect or arching scape is furnished with 4–5 thin, papery, triangular, reddish bracts. *Flowers*: pendant, zygomorphous (Fig. 4), red, ventricose near the base; tepals 5 mm long, 2 mm broad, greenish with a darker green midnerve and recurved reddish tips; stamens and style included.

Gasteria baylissiana is a beautiful new dwarf species of *Gasteria*, which was collected by Colonel Roy Bayliss near Somerset East in the Cape. About 4 years ago he sent a small living plant to me in Heidelberg (Germany). Since then it has been cultivated in the Heidelberg Botanical Garden. It has flowered every year and during this time has not altered its growth-form, its size and colour of the leaves. *G. baylissiana* is one of the smaller *Gasterias* like *G. brevifolia* Haw., *G. ernestii-ruschii* Dtr., *G. neliana* V. Poelln. (the two latter are only forms of *G. pillansii* Kensit.) and *G. liliputana* Poelln., but it differs from all these species by the color and structure of the leaf epidermis. In this point *G. baylissiana* resembles *G. batesiana* Roley, but this plant becomes much bigger, and the leaves are spirally arranged. One must, however, take note that in certain circumstances *G. baylissiana* exhibits some variations in habit. Col. Bayliss reports that his original plant, grown in dense shade in Grahamstown since 1965, is as in nature, a



FIG. 1
Gasteria baylissiana; type. Holotype.



FIG. 2
Cluster of *Gasteria baylissiana* in cultivation (Bot. Garden, Heidelberg)

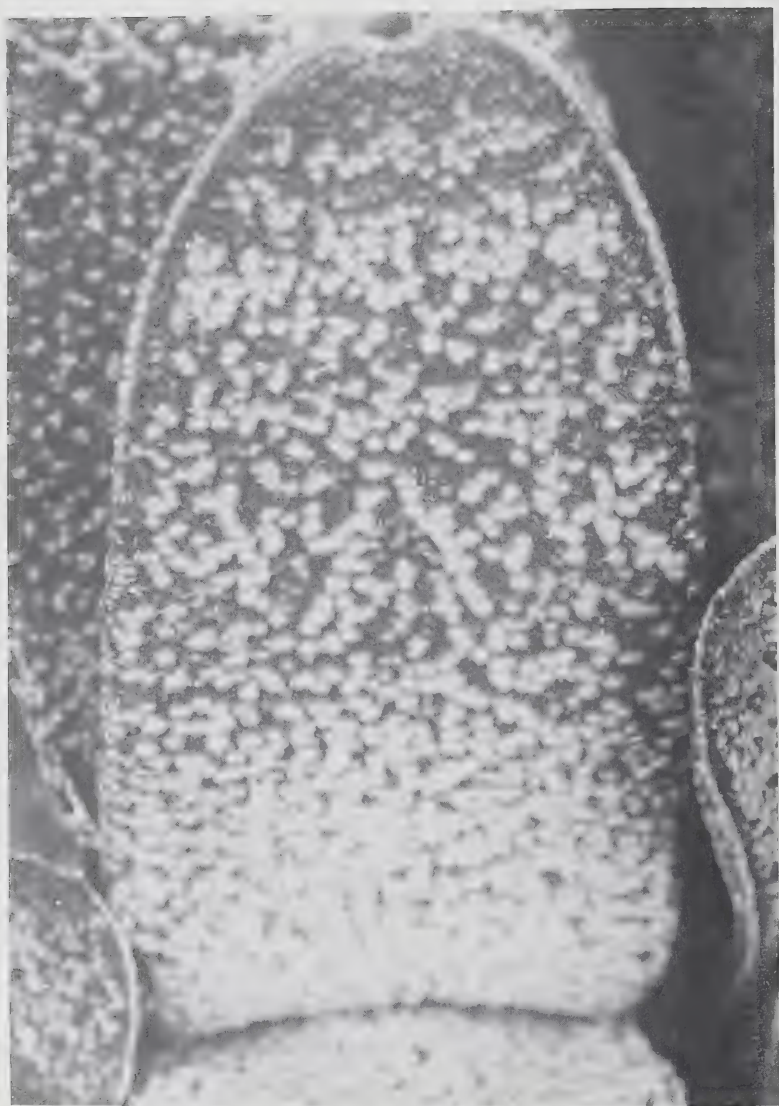


FIG. 3
Gasteria baylissiana, leaf surface.

compact group of suckers as depicted in the type plant, grown in Heidelberg, Germany. A second plant, grown under greenhouse conditions in Grahamstown and used for the distribution of suckers to the Botanical Research Institute, Pretoria and other institutions, has more elongated leaves, up to about 100 mm long and 15–20 mm broad. These plants may produce up to three inflorescences a season, sometimes vigorous and branched. The shape and the colour of the flowers, the texture and the surface of the leaves are the main diagnostic characters of this remarkable species.

ACKNOWLEDGEMENTS

I am very indebted to Col. Bayliss for sending living plants to the Heidelberg Botanical Garden and giving me the permission to dedicate to him this decorative plant; I am furthermore indebted to Dr. R. A. Dyer for the revision of the description of the new *Gasteria*.



FIG. 4

Gasteria baylissiana, left: 2 inflorescences right: flowers enlarged.